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AUTHOR Honig, A. S.; Lally, J. R.
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ABSTRACT

This study investigates characteristics of experienced teachers of infants in terms of the kinds of adult-child interactions that occur. Two measurement instruments were developed so that teacher-infant relationships could be studied objectively. Assessing the Behavior of Caregivers (ABC) I and II are checklists for use with infants (0-18 months) and toddlers (18-36 months). Observers recorded adult-child interactions in terms of the behaviorally defined categories of the ABC instruments during various aspects of infant day care programs. Subjects were two teachers (each with 4 years experience) who worked with infants, and 2 teachers (each with 7 years experience) who worked with toddlers. Both forms of the checklist were found to be effective in monitoring infant day care programs. The kinds and frequencies of behaviors emitted by the teachers reflected well the social-emotional and cognitive goals of a developmental day care program for younger and older infants. Copies of ABC I and II are appended to the document. (DP)

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BEHAVIOR PROFILES OF EXPERIENCED TEACHERS OF INFANTS

A. S. Honig[1] and J. R. Lally

Syracuse University

The proliferation of day care facilities for infants under three years of age has brought with it a growing concern with respect to the type and quality of care provided for infants and toddlers. Such group care programs are largely service-oriented and often have nonexistent or limited funds for monitoring adult inputs to assure a developmentally nourishing program to young children. That such assurance is crucial is suggested by a good deal of the literature on antecedents of high social-emotional and intellective competence in young children. For example, Watts, Burnett, & Halfar (1973) in their longitudinal ecological study of infant development, have confirmed that highly competent three-year-olds, regardless of social class, have experienced markedly more interactions with adults in intellectually valuable activities.

If limited financial or personnel resources do exist which may permit evaluation of adult-infant interactions, then certainly neither sophisticated nor lengthy measurement instruments are appropriate for consideration. Brevity, ease of use, specificity of developmentally desirable adult inputs, and sensitivity to caregiver differences in such inputs are desirable characteristics of such an instrument.

It is also important that input characteristics of "master" teachers of infants and toddlers be ascertained by means of such an instrument. In this manner the kinds, amounts, and qualities of adult caregiving behaviors offered in a given day care program can be compared with the caregiving behaviors offered by highly-trained adult caregivers.

[1] Paper presented at the meeting of the American Educational Research Association, Chicago, April 1974.

The authors have created two checklists, Assessing the Behaviors of Caregivers (ABC), which have been found easy to learn and highly sensitive in differentiating adult inputs (Honig & Lally, 1973a). ABC-I is a 40-item checklist developed to focus on seven behavioral areas. These areas reflect the following goals for teachers of infants under 18 months:

1. Facilitation of early language in infants.
2. Positive social-emotional behaviors toward and with infants.
3. Adult negative social-emotional behaviors with infants. (Hopefully frequencies in this category will be found to be minimal.)
4. Presentation of Piagetian games and opportunities for sensori-motor learning.
5. Provision of caregiving routines (such as feeding and diapering) to infants.
6. Performance of necessary housekeeping tasks.
7. Provision of motoric and kinesthetic experiences for infants.

An eighth category "Does nothing" has been included in the checklist.

The ABC-I checklist allows a recorder who so desires to note in addition to teacher behavior the particular infant with whom behavior occurs.

ABC-II has been developed to reflect teacher involvement with special developmental concerns for infants from 18 months to 36 months.

ABC-II is a 44-item checklist (with 5 optional additional items), which reflects the following teacher behaviors with older infants:

1. Facilitation of language development.
2. (a) Facilitation of social-personal skills
   (b) Facilitation of physical skills.
3. Facilitation of concept development.

4. Provision of social-emotional positive behaviors.
5. Use of social-emotional negative behaviors (expected to be minimal).
6. Provision of caregiving routines to the infants.
7. The performance of necessary housekeeping tasks.
8. Optional items: Qualitative categories which reflect teacher attention to the problem of the match, fostering of child creativity, etc.

Both checklists have an additional "Do Nothing" category. Copies of both checklists ABC-I and ABC-II are appended to this paper.

The mean percent inter-observer agreement attained for ABC-I is 84%. A mean inter-observer agreement of 88% has been attained for the first seven categories of ABC-II.

The present study represents an inquiry into the profiles of behaviors exhibited by highly experienced teachers of younger and older infants. Other papers provide information on less experienced teachers (Honig & Lally, 1973b, 1973c).

Subjects

One black and one white teacher, each with four years of experience with younger infants and frequent in-service training, were the subjects for 46 half-hours of observation with the ABC-I checklist.

One black and white teacher, each with seven years of experience with older infants and frequent in-service training, were the subjects for 59 half-hours of observation with the ABC-II checklist.

Procedure

Observers, stationed in the classroom, recorded during each half-hour the first clear example of each behavioral item which was emitted by a designated teacher during each two-minute rating interval. This tally was repeated for three more two-minute rating intervals. The observer rested for two minutes

then rated again for four more two-minute periods. This ten-minute cycle was repeated three times for each half-hour session for each caregiver, thus allowing a maximum of 12 tallies per individual behavior item during morning and afternoon times of the day and during early and later times of the week. In addition, since the ABC-II teachers are located in distinctive environments in an open-education program model, teacher behaviors were sampled within each environment provided for the toddlers. The Syracuse University Children's Center Infant-Fold and Toddler classrooms provided the locale for all observations.

The following classroom environments were sampled:

1. lunch area
2. small-muscle area
3. large-muscle area
4. outdoor play area
5. sensory experience area (includes reading corner)
6. creative expression area (includes housekeeping, art work, water-play, and snack-table sections)

Results

Language inputs were prominently contributed by teachers of both younger and older babies. Table 1 indicates that with younger babies a variety of language interactions accounted for about one-third of all teacher behaviors. Teachers of

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Insert Table 1 about here

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older infants, however, provided language in almost half of their total behavioral repertoire. Further analysis confirmed that neither time of day nor day of week was associated with changes of more than a few percentage points in these input patterns.

Place of observation did affect the language facilitation frequency of ABC-II teachers. In the lunch room, where toddlers eat family-style with teachers at tables, and in the Sensory Experience classroom area, the highest rate of verbalizing by adults was recorded. The lowest rate occurred in the outdoor play area.

The kinds of language items delivered to infants varied widely. Tables 2 and 3 indicate that simple conversing or chatting remarks were by far the most frequent kind of language teachers used with both younger and older infants. "Giving infor-

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Insert Tables 2 and 3 about here

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mation" to and "asking questions" of children were also very frequent among all four teachers. Teachers of older infants, however, gave information and questioned or made requests in 66% and 73% respectively of the two-minute rating intervals sampled. Teachers of younger infants did so in about 28% and 19% of the rating intervals. ABC-II teachers also used a great deal of what Cazden (1965) has called "modeling" and "expanding" language for children. ABC-II teachers provided more reading experiences for children (in about 16% of the sampled intervals) than ABC-I teachers (3% of the intervals sampled).

Solicitous remarks were offered in almost one-quarter of sampled intervals to older infants and somewhat more (30%) to younger babies. Verbal praise was offered in about one-third of the rating intervals to younger infants, but in almost half of the rating intervals by teachers of older infants.

Teachers of the younger babies provide positive social inputs more frequently. All master teachers smiled a great deal to children, but loving tones were far more prevalent among caregivers of younger babies. Physical loving contacts were provided slightly more to younger babies.

The relation of teacher repertoire to time of day is examined in Table 4.

Insert Table 4 about here

Younger babies in either the morning or afternoon program received about the same amount of positive social interactions. In contrast, such inputs to older babies did vary with time of day, and occurred twice as frequently (13%) during afternoons compared to mornings (6%). Negative social inputs to the younger babies, although quite rare (1 to 4% of all recorded teacher behaviors) occurred almost three times more often in afternoons than in mornings.

Place as well as time was somewhat related to teachers' social-emotional contacts. In the lunch area, positive social-emotional behaviors represented only 2% of the total behaviors recorded for ABC-II teachers. Negative social-emotional behaviors, usually verbal or gentle physical restraints, represented about 20% of the behaviors recorded there.

In general, negative social-emotional inputs such as frowns, verbal or gentle physical restraints were more frequently used with older infants. None of the four master teachers used physical punishment. Never did an ABC-II teacher and exceedingly rarely (under 1% of intervals) did an ABC-I teacher ignore a child who showed need for attention. Verbal criticisms or scolds by ABC-II teachers very rarely occurred. They were emitted in only .3% of the 708 two-minute intervals sampled. Isolation as a behavior-modification technique to decrease unacceptable behaviors occurred in fewer than 1% of the sampled intervals with young babies, but in about 16% of sampled intervals with older babies.

The amount of child care and room care varied with children's age. Twice as much preparing and feeding of food and one-and-a-half times as much room-tidying was done by teachers of younger babies compared to their colleagues working with toddlers.

Piagetian sensorimotor inputs were recorded for ABC-I teachers whereas facilitation of preoperational concept learning was recorded for ABC-II teachers. Appropriate games and opportunities for Piagetian learning were carried out by all

four teachers in about one-fourth of the time periods sampled. ABC-II teachers arranged learning of categorization and seriation concepts twice as frequently, however, as they arranged for learning of number or physical causality concepts.

Social personal skills were facilitated by the teachers of older infants to the same extent regardless of time of day. Such encouragements represented about 6 to 10% of the total behavioral inputs by teachers whether in the morning or afternoon. A small but regular tendency to increase such inputs from Monday through Friday was observed for both teachers.

Discussion

The behavior profile of experienced infant teachers affirms the changes in program emphases carried out by adults sensitive to young children's increasing readiness for more challenging social, cognitive, and motoric experiences and choices. Thus although language inputs of all kinds are frequently delivered to younger babies, older infants in a program which stresses language developmental (as well as Eriksonian and Piagetian) principles are literally offered a rich smorgasbord of verbal communications. That such inputs did not decrease as the teachers' working day went on with its attendant drain on energy is a tribute to the effectiveness of the teachers observed. Their language input stayed at high levels throughout the days of the week. This again reflects the fact that neither 'Friday-fatigue' nor 'slow-to-start Monday' factors affected the teachers' verbal interactions with children.

The differentiated environments of the open-education model in which the older infants participate might have been expected to affect the level or quality of teacher inputs, since children choose freely the activity areas in which they wish to play and learn. The Sensory Experience and lunch areas were found to be associated with more teacher language, compared to the other areas. This seems

highly reasonable since reading to children is an important activity in the one area and close contact at a single lunch table characterizes the other area. Yet in none of the areas, even where child motoric behaviors were predominant, did teachers fail to input a good deal of language to the children. Thus teachers highly trained in the appropriate uses of language in a variety of settings can offer a wealth of both emotionally and cognitively facilitating language experiences, regardless of the nature of the activity areas where children prefer to enter and participate.

Considering the importance given by Erikson (1963) to the development of autonomy and of initiative in toddlers and preschoolers, it was thought that his ideas on trust at this age might be misinterpreted by our teachers to mean the withdrawal of many of the positive social-emotional interactions that were evident with younger infants. The findings with regard to provision of praise and of positive social-emotional behaviors for these children were very gratifying. The data indicate that a teacher's sensitivity to a young child's increasing needs for independence (as indicated by ABC-II items such as "promotes self-help") did not preclude her offering positive and happy responses to older toddlers. The lack of punitive or harsh behaviors by teachers who were helping young children learn behavioral limits or rules was also entirely consistent with developmental goals for managing child behavior.

The finding of more positive social-emotional behaviors by ABC-II teachers in the afternoon is very much a function of the daily nap taken by infants. Before and after nap time teachers often soothe, cuddle, or reassure youngsters for whom either getting to sleep or waking up are times when they require such extra adult support. Also ABC-II caregivers had a respite from active teaching while toddlers napped. Teachers of younger babies had no such rest, since afternoon infants arrived relatively soon after the morning group left. This scheduling pattern may account for the occurrence of some 4% of negative social inputs in afternoons compared to the almost nonexistent percentage recorded during mornings.

The learning of Piagetian sensori-motor and preoperational concepts was encouraged through a goodly amount of teacher arrangement of materials and provision of opportunities for special games. The data show that the years of inservice training which all four teachers had experienced was quite successful in helping them become familiar with and proficient at such specialized skills.

Conclusions

Both forms of a brief, easy-to-learn checklist of behaviorally-defined items of teacher input were found to be effective in monitoring a program for infants from low-income families. The kinds and frequencies of behaviors exhibited by four experienced caregivers have been shown to reflect exceedingly well the social-emotional and cognitive goals of a developmental day care program for both younger and older infants. Thus, the Assessing the Behaviors of Caregivers checklists can prove useful in monitoring the quality of care offered in infant programs. When group care is provided for infants from disadvantaged homes, such monitoring is particularly important to ensure the translation of program philosophy and objectives into positive living and learning experiences. Data reported for experienced teachers can then serve to focus inservice training efforts in such a way as to help inexperienced teachers optimize their caregiving interactions with infants.

References

Cazden, C. B. Some implications of research on language development for pre-school education. In R. D. Hess & R. M. Bear (Eds.), Early education. Chicago: Aldine-Atherton, 1958.

Erikson, E. H. Childhood and society. (2nd ed.) New York: Norton, 1963.

Honig, A. S., & Lally, J. R. Assessing the behaviors of caregivers: ABC-I and ABC-II. Abstracted in: Catalog of Selected Documents in Psychology, 1973, 3, 79-80.

Honig, A. S., & Lally, J. R. Assessing teacher behaviors with infants in day care. Paper presented at the meeting of the American Educational Research Association, New Orleans, February 1973b.

Honig, A. S., & Lally, J. R. Toddler-teachers: Differences between "well-trained" and "master" teachers. Unpublished manuscript, Syracuse University Children's Center, 1973c.

Watts, J.C., Barnett, I.C., & Halfar, C. Environment, experience and development in early childhood. Final Report. Grant No. CG-9916 to the Office of Economic Opportunity, Head Start Division, U.S. Department of Health, Education, and Welfare, 1973.

Table 1

Percentage of an Experienced Caregiver's Repertoire

Represented by each Behavioral Category

Behavioral Category	ABC-I Repertoire Percentages	ABC-II Repertoire Percentages
Language Facilitation	33.3	47.2
Positive Social-Emotional Input	23.8	8.1
Negative Social-Emotional Input	2.4	9.3
Piagetian:		
a. Sensorimotor Skills	18.3	--
b. Concept Development	--	11.6
Social-Personal Skills	--	7.5
Caregiving Routines With Infants	7.6	7.5
Room Care	7.7	5.8
Motoric Inputs	6.7	2.6
Do Nothing	.1	0.0

TABLE 2

Percentage of Caregiver Behaviors Recorded for Two Master Teachers of 6 to 15 Month Old Infants During 552 Two-Minute Observations
ABC I

Items	% Tallied
I. Language Facilitation	
1. Elicits vocalization (through initiation and contingent responses)	42.5
2. Converses: chats to infant	79.2
3. Praises or encourages child	36.1
4. Offers help or solicitous remarks	30.6
5. Inquires of child; requests	19.2
6. Gives explanation, information, or culture rules	28.4
7. Labels sensory experiences	4.0
8. Reads to or shows pictures	3.3
9. Sings to or plays music for	6.0
II. Social-Emotional Positive Inputs	
1. Smiles at child	56.5
2. Uses loving or reassuring tones	55.8
3. Provides physical loving contact	17.0
4. Plays social games with child	6.0
5. Uses eye contact to arouse, orient, or sustain infant's attention	50.2
III. Social-Emotional Negative Inputs	
*1. Criticizes verbally; scolds;	0.0
*2. Forbids; negative mands	9.1
*3. Acts angry; is physically impatient; frowns; restrains child physically	0.1
4. Punishes physically	0.9
5. Isolates child (as behavior modification technique for unacceptable behaviors	0.0
6. Ignores child when child shows need for attention	0.1
IV. Presentation of Piagetian Tasks and Opportunities for Sensorimotor Development	
1. Object Permanence	29.3
2. Means and Ends	27.0
3. Imitation	34.4
4. Causality	37.1
5. Prehension	30.3
6. Space	11.6
*7. New schemas	8.3
V. Caregiving Routines: with child	
1. Feeds	22.3
2. Diapers; Toilets	7.8
3. Dresses; Undresses	4.3
4. Washes; Cleans	10.7
*5. Prepares child for sleep	5.2
*6. Physical shepherding	7.5
*7. Eye-checks on child's well-being	78.3
VI. Caregiving Routines: with environment	
1. Prepares food	6.3
2. Tidies room or environment	28.1
*3. Helps other caregivers	0.0
VII. Physical Development	
1. Provides kinesthetic stimulation	38.8
2. Provides large-muscle play	14.5
VIII. Does nothing	0.0

*All starred items have been added to the ABC (Assessing Behaviors of Caregivers) checklist subsequent to this study or were initially combined, as indicated, with other items. Percent tallied was based on 120 two-minute observations for these items.

TABLE 3

Percentage of Caregiver Behaviors Recorded for Two Master Teachers of Infants 18-36 Months of Age During 708 Two-Minute Observations

ABC II

Items	% Tallied
I. Facilitates Language Development	
1. Converses	64.7
2. Models language	78.2
3. Expands language	52.0
4. Praises, encourages	48.9
5. Offers help, solicitous remarks, or makes verbal promises	24.4
6. Inquires of child or makes request	73.7
7. Gives information	66.8
8. Gives culture rules	39.7
9. Labels sensory experiences	29.9
10. Reads or identifies pictures	15.8
11. Sings or plays music with child	11.0
12. Role-plays with child	15.3
II. Facilitates Development of Skills	
Social Personal	
1. Promotes child-child play (e.g., with puzzles, blocks, etc.)	11.6
2. Gets social games going (e.g., London bridges)	7.1
3. Promotes self-help and social responsibility	24.7
4. Helps child recognize his own needs	16.4
5. Helps child delay gratification	20.3
6. Promotes persistence, attention span	6.8
Motoric Inputs	
7. Small muscle, perceptual motor	14.7
8. Large muscle, kinesthesis	15.4
III. Facilitates Concept Development	
1. Arranges learning of space & time	34.2
2. Arranges learning of seriation, categorization, & polar concepts	47.6
3. Arranges learning of number	20.2
4. " " " physical causality	23.4

Items	% Tallied
IV. Social-Emotional: Positive Inputs	
1. Smiles at child	41.4
2. Uses raised, loving or reassuring tones	18.5
3. Provides physical loving contact	13.0
4. Uses eye contact to draw child's attention	11.9
V. Social-Emotional: Negative Inputs	
1. Criticizes verbally, scolds, threatens	.3
2. Forbids, negative mands	42.5
3. Frowns, restrains physically	53.8
4. Isolates child physically-behav. mod.	16.5
5. Ignores child when child shows need for attention	0.0
6. Punishes physically	0.0
7. Gives attention to negative behavior which should be ignored	1.6
VI. Caregiving Routines with Child	
1. Diapers, toilets, dresses, washes, cleans	13.7
2. Gives physical help, helps helps to sleep, shepherds	23.0
3. Eye-checks on child's well-being	41.7
4. Carries child	5.9
VII. Care-giving: Environment	
1. Prepares/serves food	10.6
2. Tidies up room	20.1
3. Helps other caregiver	9.2
4. Prepares activities, arranges environment to stimulate child	14.8
VIII. Qualitative Categories	--
IX. Does Nothing	0.0

Table 4

Percentage of Teacher Repertoire Represented by each Behavioral Category During Mornings and Afternoons

Behavioral Category	ABC-I Teachers		ABC-II Teachers	
	A.M.[a]	P.M.[b]	A.M.[c]	P.M.[d]
Language Facilitation	33.8	32.5	46.9	48.5
Positive Social-Emotional Input	22.8	25.7	6.5	13.2
Negative Social-Emotional Input	1.2	4.6	11.0	4.0
Piagetian:				
a. Sensorimotor Skills	19.7	15.8	--	--
b. Concept Development	--	--	11.6	11.2
Social-Personal Skills	--	--	7.9	6.4
Caregiving Routines With Infants	9.2	4.7	7.0	3.9
Room Care	6.7	9.5	6.0	5.5
Motoric Inputs	6.6	6.9	3.0	1.9
Do Nothing	0.0	0.0	.1	.3

[a] N = 30 half hours of observations

[b] N = 16 half hours of observations

[c] N = 45 half hours of observations

[d] N = 14 half hours of observations

ABC-I

ASSESSING THE BEHAVIORS OF CAREGIVERS : INFANT FOLD

Caregiver's Name: _____ _____ Rater: _____

Date_____ Day_____ Time_____

Child's Name				
2-minute Trials				
I. LANGUAGE FACILITATION				
1. Elicits vocalization				
2. Converses with child				
3. Praises, encourages verbally				
4. Offers help or solicitous remarks				
5. Inquires of child or makes requests				
6. Gives information or culture rules				
7. Provides and labels sensory experience				
8. Reads or shows pictures to child				
9. Sings to or plays music for child				
II. SOCIAL-EMOTIONAL: POSITIVE				
1. Smiles at child				
2. Uses raised, loving, or reassuring tones				
3. Provides physical, loving contact				
4. Plays social games with child				
5. Eye contact to draw child's attention				
III. SOCIAL-EMOTIONAL: NEGATIVE				
1. Criticizes verbally; scolds; threatens				
2. Forbids; negative mands				
3. Frowns, restrains physically				
4. Punishes physically				
5. Isolates child physically-behavior modif.				
6. Ignores child when child shows need for atten.				
IV. PIAGETIAN TASKS				
1. Object permanence				
2. Means and ends				
3. Imitation				
4. Causality				
5. Prehension: small-muscle skills				
6. Space				
7. New schemas				
V. CARE-GIVING: CHILD				
1. Feeds				
2. Diapers or toilets				
3. Dresses or undresses				
4. Washes or cleans child				
5. Prepares child for sleep				
6. Physical shepherding				
7. Eye checks on child's well-being				
VI. CARE-GIVING: ENVIRONMENT				
1. Prepares food				
2. Tidies up room				
3. Helps other caregiver(s)				
VII. PHYSICAL DEVELOPMENT				
1. Provides kinesthetic stimulation				
2. Provides large-muscle play				
VIII. DOES NOTHING				

ABC-II

ASSESSING THE BEHAVIORS OF CAREGIVERS: FAMILY STYLE

Caregiver's name:_____ Rater:_____ Date_____ Day_____ Time_____
Place_____

| | | |